



Australian Government

UEECS0031 Set up, create and implement content for a web server

Release: 1

UEECS0031 Set up, create and implement content for a web server

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to set up, create and implement content for a web server.

It includes working safely, installing and administering server software and databases, server scripting, configuring access and security, and documenting work activities.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

Competency Field

Computer Systems

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to develop and implement web-based server

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) processes and workplace procedures for a given work area are identified, obtained and applied
- 1.2** WHS/OHS risk control measures and workplace procedures are followed in preparation for the work

- 1.3** Development work is determined from server performance specifications and in consultation with relevant person/s
 - 1.4** Activities are planned to meet scheduled timelines in consultation with others involved in work
 - 1.5** Development tools, testing devices and software are selected on specified requirements in accordance with relevant industry standards and workplace procedures
 - 1.6** Strategies are implemented to ensure development work is carried out in accordance with workplace procedures
- 2 Develop web services**
 - 2.1** WHS/OHS risk control measures and workplace procedures for carrying out the work are followed
 - 2.2** Server software is installed and configured to functionality and security in accordance with workplace procedures and specifications
 - 2.3** Syntax functions and features of mark-up language scripts are applied to developing client-side programming in accordance with workplace procedures and specifications
 - 2.4** Pages are created, rendered with relative and absolute links, images and table formatting using cascaded styles sheets in accordance with workplace procedures and specifications
 - 2.5** Forms are created with a variety of relevant elements and element groupings in accordance with workplace procedures and specifications
 - 2.6** Server scripting languages are applied to developing client-side programming and validated in accordance with workplace procedures and specifications
 - 2.7** Written scripts are interpreted for web functionality and management of relation databases in accordance with workplace procedures and specifications
 - 2.8** Written scripts are interpreted for web functionality and management of browser windows, security, web application deployment and administration consoles in accordance with workplace procedures and specifications

- | | | |
|---|-------------|---|
| | 2.9 | Solutions are integrated in accordance with server performance specifications |
| | 2.10 | Approaches to issues/problems are analysed to provide effective solutions in accordance with workplace procedures |
| | 2.11 | Quality of work is monitored in accordance with workplace procedures and relevant industry standards |
| 3 Test, evaluate, implement and complete documentation | 3.1 | Testing and workplace procedures are developed to evaluate client-side programming and web applications and services |
| | 3.2 | Problems in client-side programming and web service functionality are identified and rectified in accordance with workplace procedures and server performance |
| | 3.3 | Intermediate and final work reports are written in accordance with relevant industry standards and presented to relevant person/s |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Developing, implementing and testing hypertext mark-up language (HTML) pages must include at least four of the following:

- relative and absolute links, images and table formatting
- cascaded styles sheets
- forms
- new browser windows
- validation of form data
- form data input response
- form data processing
- database access
- output of database table contents
- insertion of table data to database

Developing, implementing and testing of server scripting for database access must include at least four of the following:

- installation and administration of key features of web and web application servers

Unit Mapping Information

This unit replaces and is equivalent to UEENEED110A Set up, create and implement content for a web server.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEECS0031 Set up, create and implement content for a web server

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- analysing approaches to issues/problems
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - using risk control measures
- applying syntax functions and features of mark-up language scripts
- consulting and planning with others to meet scheduled timelines
- creating and rendering web pages
- determining development server performance specifications
- developing and testing workplace procedures to evaluate client-side programming
- developing web services
- identifying problem/s in client-side programming and web services functionality
- implementing strategies to ensure work is carried out
- installing and configure web server software
- monitoring quality of work
- providing web functionality and management of browser windows, security, web application deployment and administration consoles
- providing web functionality and management of relation databases
- rectifying problem/s
- selecting development tools and testing devices and software
- writing intermediate and final work reports.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- problem-solving techniques
- relevant comparison of application servers and platforms

- relevant development tools, testing devices and software
- relevant hypertext transfer protocol (HTTP) servers
- relevant industry standards
- relevant manufacturer specifications and installation instructions
- relevant parameters of different programming languages
- relevant job safety assessments or risk mitigation processes
- relevant server scripting technologies and language
- relevant server software
- relevant testing and validation
- relevant web application technologies
- relevant web services overview
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace quality, instructions, policies and procedures.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities and equipment currently used in industry
- resources that reflect current industry practices in relation to setting up and creating content in a web server
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>